[0087] **WHAT IS CLAIMED IS:**

1. A peptide which confers increased pathogen resistance upon a plant expressing said peptide, said peptide having a sequence selected from the group consisting of SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, and SEQ ID NO:4 mutated at a position selected from the group consisting of Glu271, Trp272 and residues between and including Pro123 to Gly128, an ortholog thereof, a homolog thereof, a functionally active fragment thereof or a functionally active variant thereof.

2. A recombinant nucleic acid molecule comprising a sequence which codes for a peptide selected from the group consisting of SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3 and SEQ ID NO:4 mutated at a position selected from the group consisting of Glu271, Trp272 and residues between and including Pro123 to Gly128, an ortholog thereof, a homolog thereof, a functionally active fragment thereof or a functionally active variant thereof.

3. The recombinant nucleic acid molecule of claim 2, wherein said nucleic acid is DNA.

4. A vector containing the recombinant nucleic acid molecule of claim 2.

5. The recombinant nucleic acid molecule of claim 3, wherein said DNA sequence is operatively linked to an expression control sequence.

6. An expression vector containing the recombinant DNA molecule of claim 5.

7. A method of expressing a recombinant nucleic acid molecule in a cell containing the expression vector of claim 6, comprising culturing

the cell in an appropriate cell culture medium under conditions that provide for expression of the recombinant DNA molecule by the cell.

8. The method of claim 7, further comprising the step of purifying a recombinant product of the expression of the recombinant DNA molecule.

9. A cell transformed with the recombinant DNA molecule of claim 2.

10. The cell of claim 9, wherein said recombinant DNA molecule is integrated in the genome of said cell.

11. The cell of claim 9, wherein said cell is a plant cell.

12. A cell expressing the peptide of claim 1.

13. A plant comprising the cell of claim 11 or 12.

14. A transgenic plant expressing the peptide of claim 1.

15. A transgenic plant comprising the recombinant nucleic acid molecule of claim 2.

16. The transgenic plant of claim 15, wherein said recombinant nucleic acid is integrated into the genome of said cell.

17. A method of increasing pathogen resistance in a plant comprising the steps of: (a) introducing into a cell of said plant a recombinant nucleic acid molecule as defined in claim 2; and (b) expressing said recombinant nucleic acid molecule in said cell.

18. A method of increasing pathogen resistance in a plant comprising the steps of: (a) mutating a nucleic acid sequence which codes for p24; and (b) expressing said nucleic acid sequence in said plant, wherein said mutating results in an amino acid substitution in said

p24 which increases DNA binding affinity of PBF-2 for an elicitor response element (ERE).

19. The method of claim 18, wherein said amino acid substitution replaces Pro125 with nothing or a different amino acid.

20. The method of claim 18, wherein said amino acid substitution is Pro125 to Leu.

21. The method of claim 18, wherein said amino acid substitution replaces Trp272 with nothing or a different amino acid.

22. The method of claim 18, wherein said amino acid substitution is Trp272 to Ala.

23. The method of claim 18, wherein said amino acid substitution replaces Glu271 with nothing or a different amino acid.

24. The method of claim 18, wherein said amino acid substitution is Glu271 to any non-acidic amino acid.

25. The method of claim 18, wherein said ERE regulates expression of a pathogenesis-related (PR) gene.

26. The method of claim 25, wherein said PR gene is a PR-10 gene.

27. The method of claim 26, wherein said PR gene is PR-10a.

28. The method of claim 18, wherein the step of mutating a nucleic acid sequence is effected by a chemical mutagen, radiation, natural mutation or a recombinant DNA technique.

29. The method of claim 28, wherein said recombinant DNA technique is site-directed mutagenesis.

30. A method of increasing pathogen resistance in a plant comprising increasing DNA binding affinity of PBF-2 for an elicitor response element (ERE) of a pathogenesis-related (PR) gene.

31. The method of claim 30, wherein increasing DNA binding affinity of PBF-2 for an ERE comprises mutating a C-terminal negative autoregulatory domain of p24, wherein said C-terminal autoregulatory domain inhibits PBF-2 DNA binding and wherein said mutating decreases negative autoregulation of said domain.

32. The method of claim 31, wherein said mutating comprises an amino acid substitution in p24.

33. The method of claim 32, wherein said amino acid substitution replaces Pro125 with nothing or a different amino acid.

34. The method of claim 32, wherein said amino acid substitution is Pro125 to Leu.

35. The method of claim 32, wherein said amino acid substitution replaces Trp272 with nothing or a different amino acid.

36. The method of claim 32, wherein said amino acid substitution replaces Trp272 with Ala.

37. The method of claim 32, wherein said amino acid substitution replaces Glu271 with nothing or a different amino acid.

38. The method of claim 32, wherein said amino acid substitution replaces Glu271 with any non-acidic amino acid.

39. The method of claim 30, wherein said mutating a C-terminal negative autoregulatory domain is effected by a chemical mutagen, radiation, natural mutation or a recombinant DNA technique.

40. The method of claim 39, wherein said recombinant DNA technique is site-directed mutagenesis.

41. The method of claim 18, wherein said amino acid substitution replaces a residue between and including Pro123 to Gly128 with nothing or a different amino acid.

42. The method of claim 32, wherein said amino acid substitution replaces a residue between and including Pro123 to Gly128 with nothing or a different amino acid.

43. A method of increasing pathogen resistance in a plant comprising the step of overexpressing a nucleic acid coding for AtWhy1, StWhy1, an ortholog thereof or an analog thereof.

44. A method of increasing pathogen resistance in a plant comprising the step of overexpressing a pathogenesis-related (PR) gene.

45. The method of claim 44, wherein said PR gene is a PR-10 gene.

46. The method of claim 44, wherein said PR gene is PR-10a.